

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed September 12, 2007. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **1. Response to Objection of Drawings**

The drawings have been objected to under 37 CFR § 1.83(a) for allegedly not showing all the claimed method steps, such as simulating activities of the plurality of creatures at a first mode of simulation and simulating an activity of one of the plurality of creatures at the second mode of simulation. See Office Action, page 2. Applicants respectfully disagree.

For example, Figure 1 shows in block 100 a macroscopic simulation of a large number of animats. Accordingly, this may be referred to as a first mode of simulation. Block 120 of Figure 1 shows that detail simulation (as opposed to a macroscopic simulation) is performed for animals undergoing a change in environment. Accordingly, this may be referred to as a second mode of simulation. Therefore, the claimed features mentioned in the Office Action are disclosed in the figures. For at least these reasons, withdrawal of the objection to the drawings is requested.

To advance prosecution, however, the specification and drawings have been amended to add a flowchart describing a method of simulating the activities of a plurality of creatures. It is noted that page 3 of the originally filed application contains the same matter of the added material, so that the added material is not new to the application.

### **2. Response to Rejection of Claims under 35 U.S.C. § 112**

Claims 4, 10, and 11 have been rejected under 35 U.S.C. § 112, Second Paragraph for various informalities. The claims have been amended to correct the cited informalities. Therefore, withdrawal of the rejections is respectfully requested.

3. Response to Rejection of Claims under 35 U.S.C. § 103

Claims 1-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Barba* ("The Sims Livin' Large Expansion Pack – Prima's Official Strategy Guide" by Rick Barba). Applicants respectfully traverse this rejection.

a. Claim 1

As provided in independent claim 1, Applicants claim:

A method of simulating the activities of a plurality of creatures, the method comprising:

simulating activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation;*** and

***simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Barba* does not disclose, teach, or suggest at least "simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment," as emphasized above.

Applicants respectfully fail to appreciate the differences in level of detail and computational intensity with respect to the screenshots for the Sims computer game described in *Barda*. However, the Office Action contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing

the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998). Here, the games uses a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.

For at least these reasons, the cited art fails to teach or suggest “simulating an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment,” as recited in claim 1.

Therefore, claim 1 is patentable over the cited art, and the rejection should be withdrawn.

b. Claims 2-9

Dependent claims 2-9 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that the dependent claims 2-9 contain all the features of allowable independent claim 1. For at least this reason, the rejection of claims 2-9 should be withdrawn.

Additionally and notwithstanding the foregoing reasons for allowability of claims 2-9, these claims recite further features and/or combinations of features (as is apparent by examination of the claims themselves) that are patentably distinct from the cited art of record. Accordingly, the rejections to these claims should be withdrawn.

c. Claim 10

As provided in independent claim 10, Applicants claim:

A recordable medium having recorded thereon computer readable code, wherein the computer readable code is adapted to:

simulate activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and***

***simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 10 is allowable for at least the reason that *Barba* does not disclose, teach, or suggest at least “simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment,” as emphasized above.

The Office Action contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998). Here, the game uses a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.

Accordingly, the cited art fails to teach or suggest to “simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment,” as recited in claim 10.

Therefore, claim 10 is patentable over the cited art, and the rejection should be withdrawn.

d. Claim 11

As provided in independent claim 11, Applicants claim:

A simulator device arranged to simulate the activities of a plurality of creatures, the device being arranged to utilise at least two modes of simulation: a first mode arranged to:

simulate activities of the plurality of creatures at a first mode of simulation observable by a user, ***wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation; and***

***simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment.***

(Emphasis added).

Applicants respectfully submit that independent claim 11 is allowable for at least the reason that *Barba* does not disclose, teach, or suggest at least “simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment,” as emphasized above.

The Office Action contends that Fig. 7-17 as seen on page 130 of *Barda* shows the outside of a house simulation which is less detailed and less computationally intensive than figures showing the inside of the house as seen in Fig. 7-12 or Fig. 7-14 on pages 127-128. On this point, Applicants respectfully note that the house is not experiencing a change in environment or in response to a change, a simulation of an activity of the house is not performed at a higher level of detail and computational intensity. Further, *Barda* does not disclose that the results of the simulation of a higher level of detail are used to simulate the house at a lower level of detail for the new change in environment. Rather, *Barda* arguably shows an exterior of a house being shown at a low level of detail and an interior of the house being shown at a high level of detail.

The Office Action also mentions the existence of games such as *Starcraft* by Blizzard (released in February 28, 1998). Here, the games uses a mini-map providing an overview of a location of space vehicle in relation to its distant surroundings, where a main display segment shows the space vehicle in relation to its immediate surroundings. The main display segment is allegedly shown in higher detail than the mini-map display. As such, *Starcraft* fails to use results from one mode of simulation to provide a simulation in another mode, since both simulations run concurrently. Further, *Starcraft* shows a simulation of an object at a lower resolution in a distant view before the object is shown at a higher simulation in the main display segment. Therefore, even if results of one simulation depended on the other, in *Starcraft*, a result from a high-detailed simulation would not be used to produce a lower-detailed simulation.


Accordingly, the cited art fails to teach or suggest to “simulate an activity of one of the plurality of creatures at the second mode of simulation observable by the user, wherein results of the simulation at the second mode of simulation are used to provide a simulation of the plurality of creatures at the first mode of simulation for the new change in environment” and “wherein the first mode of simulation is less detailed and less computationally intensive than a second mode of simulation,” as recited in claim 11.

Therefore, claim 11 is not anticipated by the cited art, and the rejection should be withdrawn.

### **CONCLUSION**

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

  
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